Customer No.: 31561
Application No.: 10/064,266
Docket NO.:7554-US-PA

REMARKS

Present Status of the Application

This is a full and timely response to the outstanding final Office Action mailed on February 19, 2004. It is noted with great appreciation that the Office considers claims 21-22 as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Office Action has also rejected claims 1, 3-8, 10-13, 17-20 under 35 USC 103(a) as being unpatentable over Present of Prior Art (PPA) in view of Tsui (US 2003/0027413). After carefully considering the remarks set forth in this Office Action and the cited references, Applicants respectfully submitted that the presently pending claims are in condition for allowance. Reconsideration and withdrawal of the Examiner's rejection are requested.

Discussion of Office Action Rejections

The Office Action rejected claims 1, 3-8, 10-13, 17-20 *under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (AAPA hereinafter) and Tsui (US 2003/0027413 A1).*

The PTO can satisfy its burden of establishing a prima facie case of obviousness "only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). "Moreover, the question is not simply whether the prior art 'teaches' the particular element of the invention, but whether it would 'suggest the desirability, and thus the obviousness, of making the combination.'" ALCO Standard Corp. v. Tennessee Valley Authority, 808 F.2d 1490, 1498, 1 U.S.P.Q. 2d 1337, 1334 (Fed. Cir. 1986). For at least the reasons described in detail hereinafter, Applicants respectfully assert that AAPA in view of Tsui is legally deficient for the purpose of rendering claims 1, 8 and 13 unpatentable.

The present invention is in general related to a method of fabricating a flash memory. Particularly, claims 1, 8 and 13 teach, among other things, that "forming a silicon carbide layer of about 100Å to about 1000Å thick on the inter-layer dielectrics". Since the silicon carbide layer of the instant case is capable of absorbing UV irradiation, UV irradiation will not penetrate into the substrate 100 to affect the underlying memory cell.

Tsui, on the other hand, teaches a formation of an adhesion layer (or glue layer) 130 on the copper layer 120, instead of a protective layer from UV penetration. Further, Tsui specifically teaches that the adhesion layer must be transparent to UV radiation in order to program/erase flash memory cells on integrated circuits [0009]. Tsui thus teaches away from the present invention.

Moreover, Tsui teaches that the thickness of the adhesion layer must be less than 200 Å and in a preferred embodiment, the thickness of the adhesion layer is between 25 Å and 150 Å. The present invention instead teaches in claims 1, 8 and 14 that the silicon carbide layer has a thickness of about 100 Å to about 1000 Å, preferably from 300 Å to about 500 Å. Although the claimed range overlap the range disclosed by the prior art, "a prima facie case obviousness may still be rebutted by showing the criticality of the claimed range", and that "the art, in any material respect, teaches away from the claimed invention." (see MPEP 2144.05). Since the thickness, among other properties, of the silicon carbide material achieve the unexpected result of UV protection and Tsui also teaches away from the claimed invention, Applicants respectfully submit that AAPA and Tsui, either alone or in combination, fails to render the present invention obviousness.

For at least these reasons, Applicant respectfully asserts that claims 1, 8 and 13 and claims 3-7, 10-12 and 15-22 which utilize claims 1, 8 and 13, respectively, as a base claim patentably define over AAPA and Tsui. Reconsideration and withdrawal of this rejection on the now pending claims are respectively requested.

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CONCLUSION

For at least the foregoing reasons, it is believed that the presently pending claims 1, 3-8, 10-13, 16-22 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

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